



AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A guide wire comprising:

a wire member including a welded portion formed by welding a first wire disposed on the distal side of said wire member to and a second wire disposed on the proximal side from said first wire, ~~and made from a material having an elastic modulus larger than that of said first wire, said welded portion being made substantially smooth;~~

the first wire and the second wire each possessing an end face, the end face of the first wire and the end face of the second wire being welded to one another at a welded portion so that the first and second wires do not axially overlap one another;
and

a cover layer provided on the outer periphery of said wire member and covering ~~at least~~ said welded portion between said first wire and said second wire.

2. (Withdrawn) A guide wire comprising:

a wire member including a welded portion formed by welding a first wire disposed on the distal side of said wire member to a second wire disposed on the proximal side from said first wire and made from a material having an elastic modulus larger than that of said first wire; and

a cover layer provided on the outer periphery of said wire member covering at least said welded portion between said first wire and said second wire;

wherein said welded portion has a projection projecting in the outer peripheral direction.

3. (Currently Amended) A guide wire comprising:

a wire member including a welded portion formed by welding a first wire disposed on the distal side of said wire member to a second wire disposed on the proximal side from said first wire; and ~~made from a material having an elastic modulus larger than that of said first wire; and~~

a cover layer provided on the outer periphery of said wire member covering at least said welded portion between said first wire and said second wire; and

a distal-side cover layer disposed on the distal side from said cover layer, said distal-side cover layer being made from a material different from that of said cover layer;

wherein the cover layer and the distal-side cover layer do not axially overlap one another.

4. (Canceled)

5. (Withdrawn) A guide wire comprising:

a wire member including a welded portion formed by welding a first wire disposed on the distal side of said wire member to a second wire disposed on the

proximal side from said first wire and made from a material having an elastic modulus larger than that of said first wire; and

a cover layer provided on the outer periphery of said wire member covering at least said welded portion between said first wire and said second wire; and

a proximal-side cover layer disposed on the proximal side from said cover layer, said proximal-side cover layer being made from a material different from that of said cover layer.

6. (Withdrawn) A guide wire according to claim 5, wherein said cover layer is formed in such a manner that said wire member is substantially not heated at the time of covering said wire member with said cover layer, and said proximal-side cover layer is formed in such a manner that said wire member is heated at the time of covering said wire member with said proximal-side cover layer.

7. (Previously Presented) A guide wire according to claim 1, wherein the cover layer is made from a material that reduces friction of the cover layer.

8. (Previously Presented) A guide wire according to claim 1, wherein the cover layer is made from a fluorocarbon resin or hydrophilic material.

9. (Currently Amended) A guide wire according to claim 1, wherein the cover layer is made from a silicone resin and functions as a reinforcing layer for reinforcing the welded portion.

10. (Previously Presented) A guide wire according to claim 1, where the cover layer is made from a metal having an elastic modulus that is equal to or smaller than that of the first wire.

11. (Currently Amended) A guide wire according to claim 1, wherein the thickness of the cover layer is within the range of 1 to 2 μm and is approximately uniform throughout the cover layer.

12. (Currently Amended) A guide wire according to claim 1, wherein the thickness of the cover layer covering the welded portion is approximately uniform.

13. (Currently Amended) A guide wire according to claim 1, wherein the cover layer extends across the welded portion and has a thickness that is approximately uniform from a proximal end of the welded portion to a distal end of the welded portion.

14. (Previously Presented) A guide wire according to claim 1, wherein the first wire is made from a superelastic alloy and the second wire is made from stainless steel.

15. (Previously Presented) A guide wire according to claim 1, wherein the second wire is made from a Co-based alloy and the Co-based alloy is a Co--Ni--Cr alloy.

16. (Canceled)

17. (Previously Presented) A guide wire according to claim 3, wherein the cover layer is made from a material that reduces friction of the cover layer.

18. (Previously Presented) A guide wire according to claim 3, wherein the cover layer is made from a fluorocarbon resin or hydrophilic material.

19. (Currently Amended) A guide wire according to claim 3, wherein the cover layer is made from a silicone resin ~~and functions as a reinforcing layer for reinforcing the welded portion.~~

20. (Previously Presented) A guide wire according to claim 3, where the cover layer is made from a metal having an elastic modulus that is equal to or smaller than that of the first wire.

21. (Currently Amended) A guide wire according to claim 3, wherein the thickness of the cover layer is within the range of 1 to 2 μm and is ~~approximately~~ uniform throughout the cover layer.

22. (Currently Amended) A guide wire according to claim 3, wherein the thickness of the cover layer covering the welded portion is ~~approximately~~ uniform.

23. (Currently Amended) A guide wire according to claim 3, wherein the cover layer covers the welded portion and has a thickness that is approximately uniform from a proximal end of the welded portion to a distal end of the welded portion.

24. (Previously Presented) A guide wire according to claim 3, wherein the first wire is made from a superelastic alloy and the second wire is made from stainless steel.

25. (Previously Presented) A guide wire according to claim 3, wherein the second wire is made from a Co-based alloy and the Co-based alloy is a Co--Ni--Cr alloy.

26. (Currently Amended) A guide wire according to claim 3, wherein a connection end face of the first wire and a connection end face of the second wire at which the first and second wires are welded are each substantially perpendicular to an axial direction of the first and second wires, and the welding between the first and second connection end faces is performed by a butt resistance welding process.

27. (Previously Presented) A guide wire according to claim 3, wherein the distal-side cover layer is made from a material that reduces friction of the distal-side cover layer.

28. (Previously Presented) A guide wire according to claim 3, wherein the distal-side cover layer is made from a fluorocarbon resin or hydrophilic material.

29. (Previously Presented) A guide wire according to claim 3, wherein the average thickness of the distal-side cover layer is in the range of 1 to 20 μm .

30. (New) A guide wire according to claim 1, wherein the second wire is made from a material having an elastic modulus larger than that of the first wire.

31. (New) A guide wire according to claim 3, wherein the second wire is made from a material having an elastic modulus larger than that of the first wire.

32. (New) A method of manufacturing a guide wire comprising:
welding a first wire to a second wire at a welded portion to form a wire member in which the first wire is disposed on a distal side of the second wire;
covering an outer periphery of the wire member at the welded portion with a cover layer while the wire member is not heated;
covering the outer periphery of the wire member on a distal side of the cover layer with a distal-side cover layer while heating the wire member.

33. (New) The method according to Claim 32, wherein the first wire possesses a connection end face that is perpendicular to an axial extent of the first wire, the second wire possessing a connection end face that is perpendicular to an axial extent of the second wire, the first and second wires being welded to one

another while the connection end face of the first wire abuts the connection end face of the second wire.

34. (New) The method according to Claim 32, further comprising covering the outer periphery of the wire member on a proximal side of the cover layer with a proximal-side cover layer while heating the wire member.

35. (New) The method according to Claim 32, wherein the second wire possesses a modulus of elasticity that is greater than the modulus of elasticity of the first wire.